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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,761

07/20/2005

Sario Buti

2247-116

9221

6449

7590

06/15/2006

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EXAMINER

TYLER, STEPHANIE E

ART UNIT

PAPER NUMBER

3754

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/542,761	Applicant(s) BUTI, SARIO	
	Examiner Stephanie E. Tyler	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/20/2005</u> . | 6) <input type="checkbox"/> Other: ____ |

Detailed Action

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Foster et al. filed on April 16, 2003 (US2004/0217134).

The Foster et al. reference discloses a sprayer device (10) with a trigger-operated pump (62) having a body (12) provided with a base that can be applied to the mouth of a liquid container and a delivery nozzle (56) wherefrom the liquid is sprayed, in said body (12) being formed a plunger chamber (14), an input duct (18) which puts the inside of the container into communication with the chamber (14) and an output duct (22) which puts the chamber (12) into communication with the sprayer nozzle (15), through an input hole (46) and an output hole (48) respectively, formed in the rear wall of the chamber (14), a trigger lever (62) hinged to the sprayer body (12) and to the stem (see fig.2)¹ of a plunger (52) tightly acting in said chamber (14) defined in the sprayer body (12), spring means (pg.2, col.2, para.0027, lines 14-19) interposed between the

¹ Refer to Appendix A to view the specified feature(s).

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trigger (62) and the sprayer body (12), and a suction and delivery valve (38) disposed inside the chamber (14) of the sprayer body to generate a first one-way passage between the input duct (18) of the sprayer body and the chamber (14) and a second one-way passage between the chamber (14) and the output duct (22) of the sprayer body, characterized in that a housing seat (32,36) suited to integrally engage a central portion (fig. 2, Appendix A) of the valve (38) is disposed in the wall of the chamber (14), in a central position between the input hole (46) and the output hole (48).

Regarding claim 2 note in figure 2 wherein the suction and delivery valve (38) with respect to the central portion (Appendix A) engageable integrally in the valve-housing seat (32,36) formed in the body (12), having an upper portion (Appendix A) acting as a shutter for the output hole (48), and a lower portion (Appendix A) acting as a shutter for said input hole (46).

Regarding claim 3 note in figure 2 wherein the upper portion (Appendix A) of the valve (38) comprises a frustoconical tang (Appendix A) with a blind hole (Appendix A) tapered so as to generate a side wall thin enough to be deformed radially inward by the liquid pressure, the frustoconical tang (Appendix A) engaging in said output hole (48) formed in the sprayer body (12).

Regarding claim 4 note in figure 2 wherein the lower portion (Appendix A) comprises a substantially dome-shaped portion (Appendix A) connected to the valve body (28) by means of two flexible bridges (44), the dome-shaped portion (Appendix A) engaging in said input hole (46) formed in the sprayer body.

3. Claims 1,5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mass et al. (6,364,172 B1).

The Foster et al. reference discloses a sprayer device (10) with a trigger-operated pump (48) having a body (44) provided with a base that can be applied to the mouth of a liquid container and a delivery nozzle (50) wherefrom the liquid is sprayed, in said body (44) being formed a plunger chamber (70), an input duct (138) which puts the inside of the container into communication with the chamber (70) and an output duct (fig.13)² which puts the chamber (70) into communication with the sprayer nozzle (50), through an input hole (72) and an output hole (82) respectively, formed in the rear wall of the chamber (70), a trigger lever (48) hinged to the sprayer body (44) and to the stem (112) of a plunger (46) tightly acting in said chamber (70) defined in the sprayer body (44), spring means (col. 16, line 17) interposed between the trigger (48) and the sprayer body (44), and a suction and delivery valve (52) disposed inside the chamber (70) of the sprayer body to generate a first one-way passage between the input duct (138) of the sprayer body and the chamber (70) and a second one-way passage between the chamber (70) and the output duct (fig. 13) of the sprayer body, characterized in that a housing seat (80) suited to integrally engage a central portion (fig. 10)³ of the valve (52) is disposed in the wall of the chamber (70), in a central position between the input hole (72) and the output hole (82).

² Refer to Appendix B to review specified feature(s).

³ Refer to Appendix C to review specified feature(s).

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Regarding claim 5 note in figures 6a-6c wherein the spring means comprise a leaf spring (col.16, line17) consisting of two elastic arms (178A, 178B), disposed parallel to each other, in which each arm (178A, 178B) is substantially C-shaped in a side view.

Regarding claim 6 note in figures 6A & 6B wherein the elastic arms (178A, 178B) are connected to each other, at one of their ends, by a cross connecting bar (56), so that the free ends (see fig.6B)⁴ of the arms (178A, 178B) are constrained to the trigger (48) and the cross connecting bar (56) abuts against the body (44) of the sprayer.

Regarding claim 7 note in figures 1 and 6B wherein the free ends (see fig.6B) of said elastic arms (178A, 178B) of the spring are constrained to the trigger (48) at the point of constraint (118) in which the stem (112) of the piston is hinged and said cross connecting bar (56) of the spring abuts against the body (44) of the sprayer forwardly beneath the piston chamber.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mass et al. in view of Miser (6,679,874 B2, filed on October 5, 2001).

⁴ Refer to Appendix D to review specified feature(s).

The Mass et al. reference discloses all the structure and functionality of the sprayer device dispenser.

However the Mass et al. reference lacks the leaf spring being made of acetal resin.

The Miser reference teaches in figure 5A a ratcheting mechanism having a spring means (315) and arms (520), wherein the spring means (315) is made of acetal resin for the purpose of minimizing any burring or wear of the spring means after repeated use.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to have modified the Mass's et al. spring material with a material of acetal resin as taught by Miser in order to increase the longevity on the spring for repeated use.

Conclusion

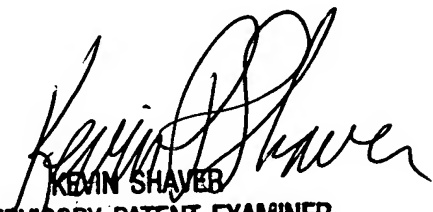
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie E. Tyler whose telephone number is 571-272-8059. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SET


KEVIN SHAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

Appendix A

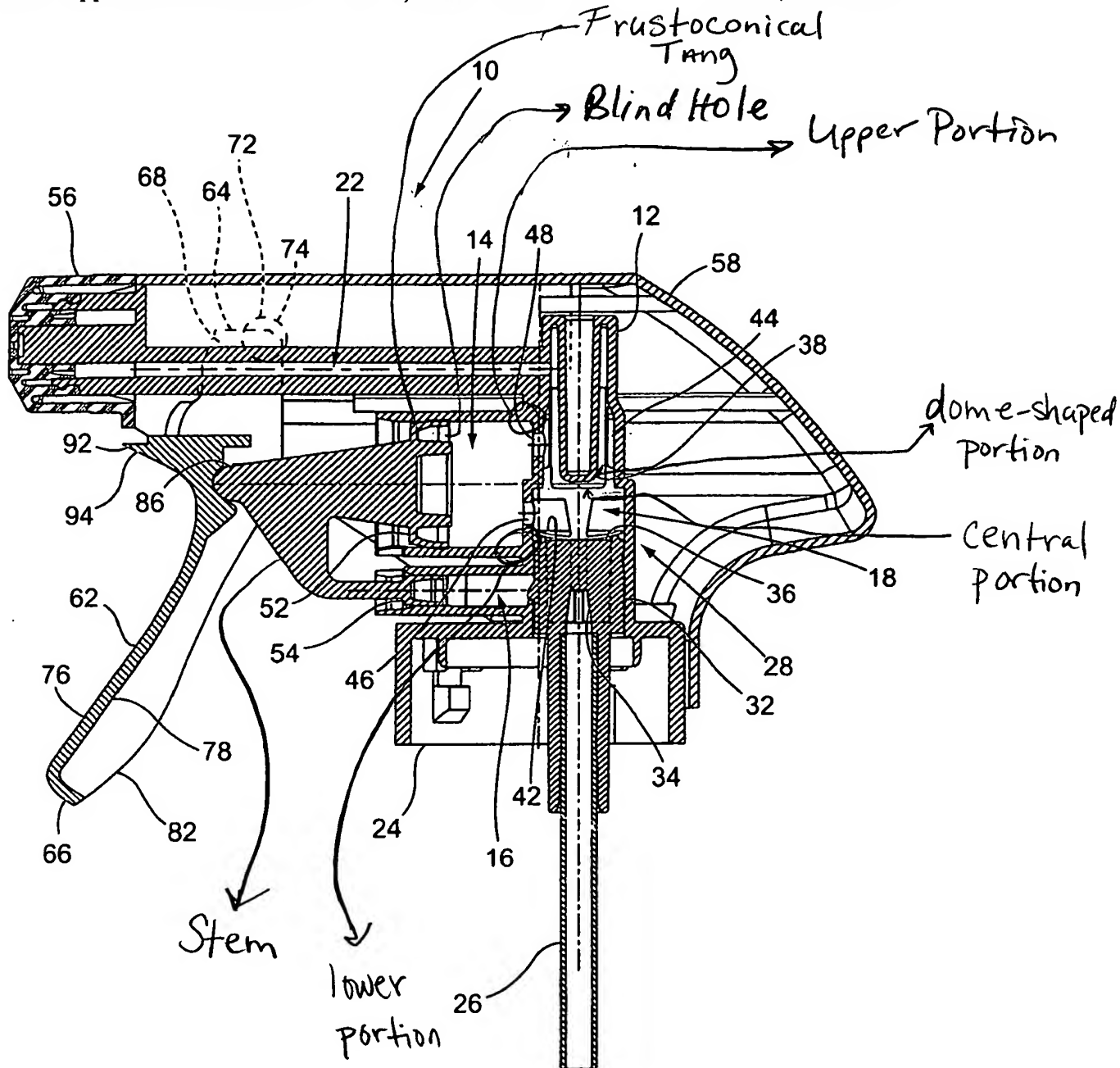
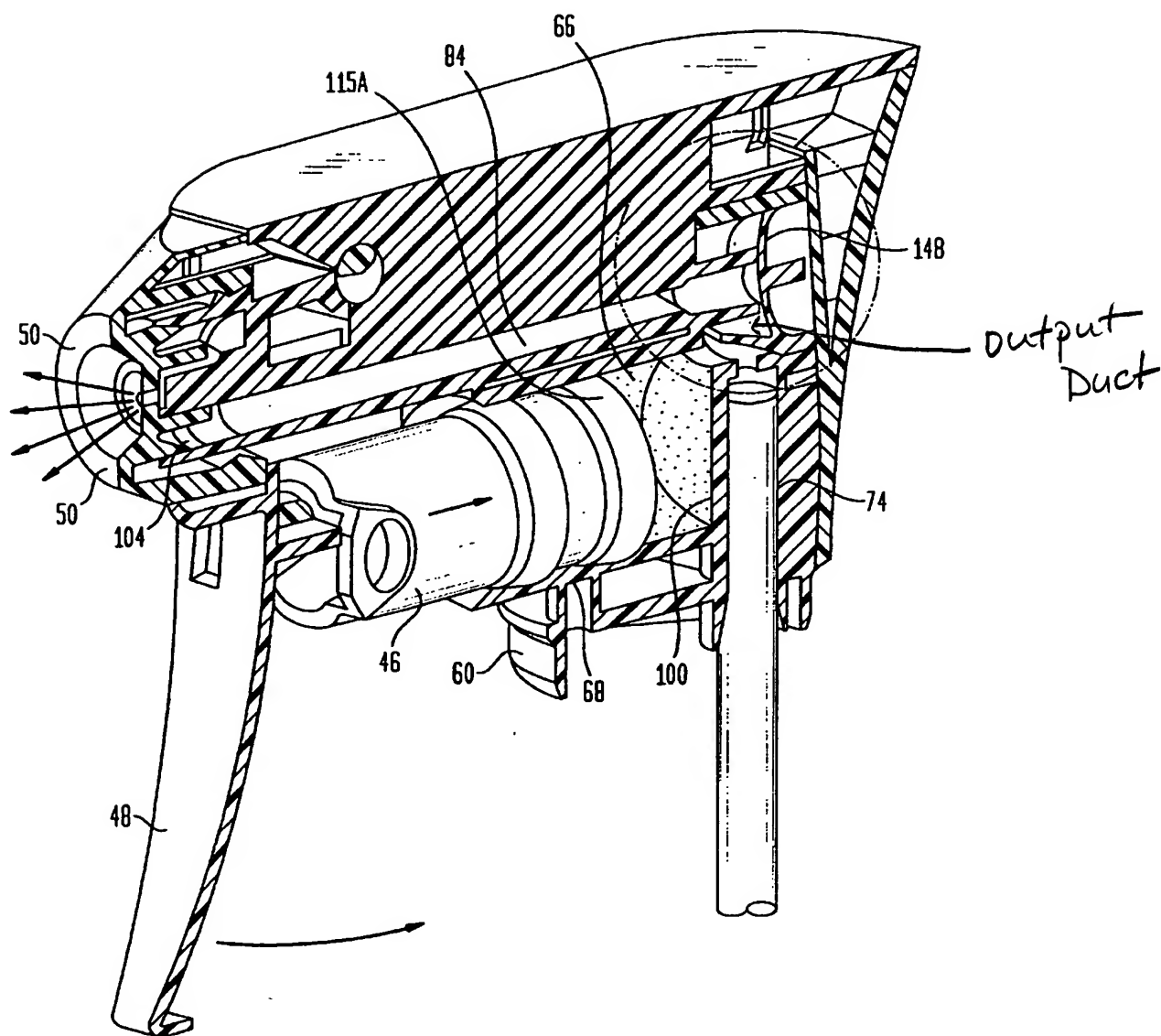


Fig. 2

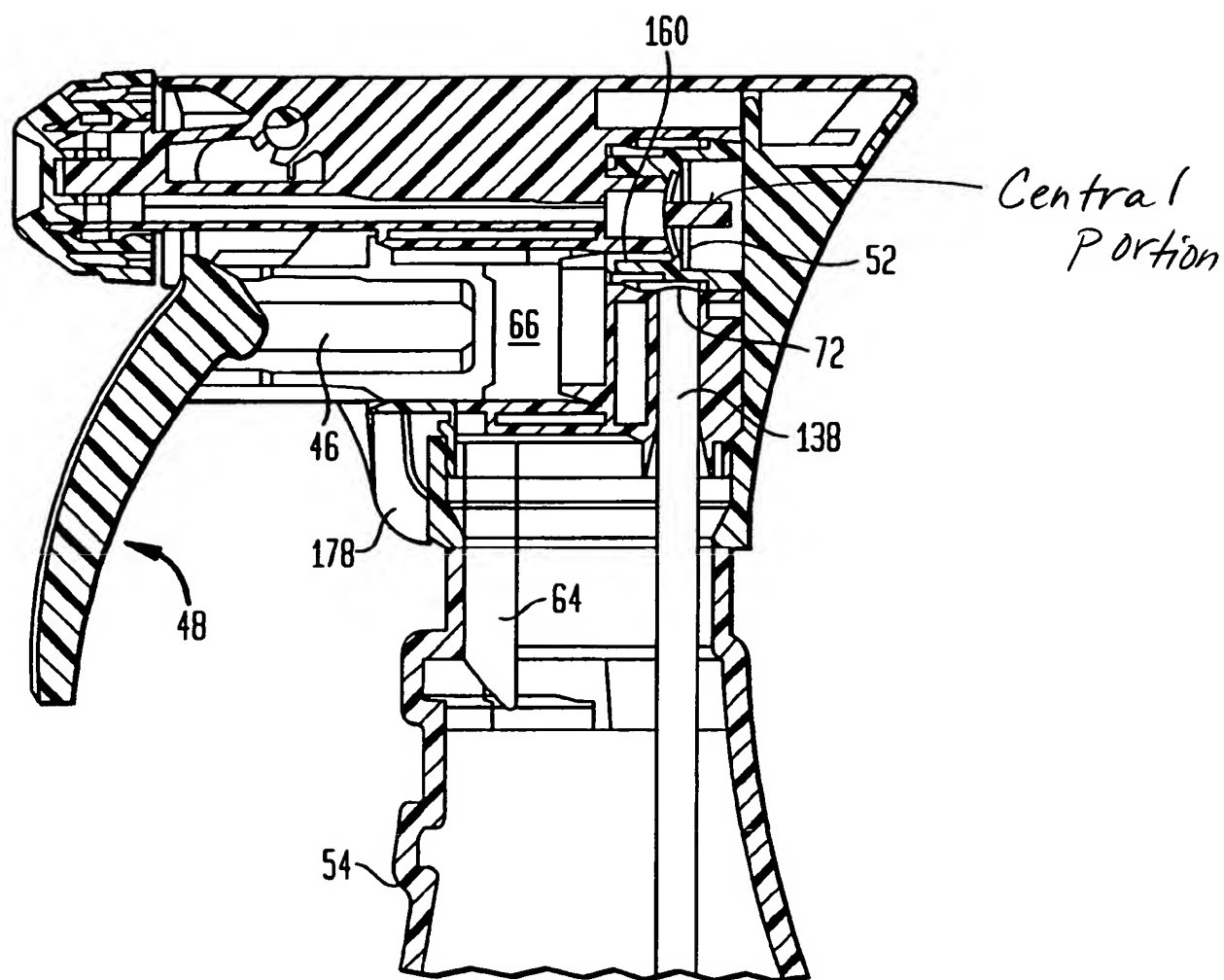
Appendix B

FIG. 13



Appendix C

FIG. 10



Appendix D

